
Appendix A

Analytical Data Tables

Table A1. Groundwater Monitoring Well Data^a

Well ID	IMW-1 ^b	IMW-2 ^c	DMW-1 ^d	CW-5 ^e
Screened Interval ^f	17 - 38 feet	17 - 38 feet	43 - 64 feet	5 - 20 feet
Volatile Organic Compounds (mg/L) ^g				
Trichlorethene	61.0	420	5.30	0.77
Vinyl chloride	3.30 J ^h	25.0 U ⁱ	0.17	4.3 J
Methylene chloride	0.38	15	0.01 U	0.10 U
Acetone	7.70 J	25.0 U	0.01 U	720
2-butanone	170	130	0.01 U	140
Toluene	2.50 J	8.00 J	0.13 J	3.10 J
4-Methyl-2-pentanone	10.0 J	25.0 U	1.40 J	70.0
2-Hexanone	0.10 U	25.0 U	0.12	0.01 U
Carbon disulfide	0.10 U	25.0 U	0.12	0.01 U
Cis-1,2-dichloroethene	54.0	25.0 U	8.10	0.68
Semivolatile organic compounds (mg/L)				
Phenol	24.4	2.41	0.17	3.53 J
2-Methylphenol	3.17	0.17	0.08 J	1.21 J
4-Methylphenol	46.6	1.72	0.42	355
2,4-dinitrophenol	0.25 U	0.25 U	0.03 U	0.25 U
4-Nitrophenol	0.25 U	0.25 U	0.03 U	0.25 U
4,6-Dinitro-2-methylphenol	0.25 U	0.25 U	0.03 U	0.25 U
Pentachlorophenol	0.25 U	0.25 U	0.03 U	0.25 U
Metals				
Barium	0.22	0.03 J	0.03 J	0.13 J
Calcium	163	111	355	7.79
Chromium, total	0.96	0.34	0.01 U	0.77
Cyanide	0.20	1.57	0.01	0.15
Iron	604	0.67	0.12 J	5.21
Magnesium	360	679	800	491
Manganese	0.42	0.86	0.86	0.08

Table A1. Groundwater Monitoring Well Data (continued)

Well ID	IMW-1	IMW-2	DMW-1	CW-5
Screened Interval	17 - 38 feet	17 - 38 feet	43 - 64 feet	5 - 20 feet
Metals (mg/L)				
Potassium	182	301	419	31.0
Sodium	4,510	2,500	8,950	1,800
Total Suspended Solids	NZ ^j	NZ	28	NZ
Alkalinity	NZ	NZ	1,041	NZ
Sulfate	NZ	NZ	521	NZ
Petroleum Hydrocarbons	NZ	NZ	NZ	NZ

Notes:

- a Source: Southwest Division Naval Facilities, 1994
- b IMW-1 = Intermediate monitoring well No. 1
- c IMW-2 = Intermediate monitoring well No. 2
- d DMW-1 = Deep monitoring well No. 1
- e CW-5 = Shallow monitoring well No. 5
- f The measurement for the screened interval is below the ground surface
- g mg/L = milligram per liter
- h J = Indicates an estimated concentration value. The result is considered qualitatively acceptable, but quantitatively unreliable.
- i U = Indicates that the substance was analyzed for but not detected above the concentration listed. The value listed is the sample quantitation limit.
- j Not analyzed

Table A2. Trichloroethene Concentration Summary

Run	Flow Rate (gallons per minute)	Well	Event Number	Untreated Concentration (mg/L) ^a	Treated Concentration (mg/L)	Percent Removal
1	2.1	IMW-1 ^b	1	40	0.17	99.5%
			2	43	1.0	97.7%
			3	33	3.8	88.5%
			4	42	11	73.8%
			Average	40	3.9	89.9%
2	5.2	IMW-1	1	41	[0.10] ^c	99.8%
			2	44	0.09	99.8%
			3	48	0.16	99.7%
			4	48	0.19	99.6%
			Average	45.3	0.14	99.7%
3	9.0	IMW-1	1	33	0.32	99.0%
			and	2	35	0.27
		DMW-1 ^d	3	38	0.22	99.4%
			4	37	0.24	99.4%
		Average	36	0.26	99.3%	
4	5.5	IMW-2	1	220	0.45	99.8%
			and	2	220	0.40
		DMW-1	3	240	0.51	99.8%
			4	240	0.46	99.8%
		Average	230	0.46	99.8%	
5 ^f	11.2	IMW-1, IMW-2, and DMW-1	1	130	2.7	97.9%
			2	120	2.7	97.8%
		Average	125	2.7	97.9%	
Total Average Percent Removal						97.3% ^g

Notes:

a mg/L = milligram per liter

b IMW-1 = Intermediate monitoring well No. 1

c [] = Indicates compound was analyzed for but not detected above the sample quantitation limit. The treated concentration is half of the sample quantitation limit.

d DMW-1 = Deep monitoring well No. 1

e IMW-2 = Intermediate monitoring well No. 2

f Sampling run was abbreviated due to system failure

g Total average computed from the averages of the five runs

Table A3. Vinyl Chloride Concentration Summary

Run	Flow Rate (gallons per minute)	Well	Event Number	Untreated Concentration (mg/L) ^a	Treated Concentration (mg/L)	Percent Removal
1	2.1	IMW-1 ^b	1	11	0.11	99.0%
			2	11	[0.7] ^c	93.6%
			3	8.3	[0.7]	91.6%
			4	120	[0.7]	99.4%
			Average	37.6	0.6	95.9%
2	5.2	IMW-1	1	12	[0.13]	98.9%
			2	11	[0.13]	98.8%
			3	12	[0.13]	98.9%
			4	11	[0.13]	98.8%
			Average	11.5	[0.13]	98.9%
3	9.0	IMW-1 and	1	9.3	0.18J ^d	98.1%
			2	8.9	[0.13]	98.5%
		DMW-1 ^e	3	9.8	0.15	98.5%
			4	8.7	[0.13]	98.5%
		Average	9.2	0.15	98.4%	
4	5.5	IMW-2 ^f and	1	NA ^g	NA	NA
			2	NA	NA	NA
		DMW-1	3	NA	NA	NA
			4	NA	NA	NA
		Average	NA	NA	NA	
5 ^h	11.2	IMW-1, IMW-2, and DMW-1	1	[5]	0.27	94.6%
			2	6.3	[0.3]	95.2%
		Average	5.7	0.29	94.9%	
Total Average Percent Removal						97.0% ⁱ

Notes:

a mg/L = milligram per liter

b IMW-1 = Intermediate monitoring well No. 1

c [] = Indicates compound was analyzed for but not detected above the sample quantitation limit. The untreated concentration is the sample quantitation limit and the treated concentration is half of the sample quantitation limit.

d J = Indicates an estimated concentration value. The result is considered qualitatively acceptable, but quantitatively unreliable.

e DMW-1 = Deep monitoring well No. 1

f IMW-2 = Intermediate monitoring well No. 2

g NA = Contaminant was not detected in influent or effluent, therefore, event is negated

h Sampling run was abbreviated due to system failure.

i Total average computed from the averages of the five runs

Table A4. Acetone Concentration Summary

Run	Flow Rate (gallons per minute)	Well	Event Number	Untreated Concentration (mg/L) ^a	Treated Concentration (mg/L)	Percent Removal
1	2.1	IMW-1 ^b	1	30J ^c	21	30.0%
			2	51J	20UJ ^d	60.8%
			3	33UJ	20UJ	39.4%
			4	29UJ	15UJ	48.3%
			Average	35.6	19	44.6%
2	5.2	IMW-1	1	41UJ	35	14.6%
			2	43UJ	18	58.1%
			3	41UJ	33	19.5%
			4	37UJ	35	5.4%
			Average	40.5	30.3	24.4%
3	9.0	IMW-1 and	1	23UJ	20	13.0%
			2	27UJ	32	0.0%
		DMW-1 ^e	3	27UJ	21	22.2%
			4	30UJ	33	0.0
		Average	26.8	26.5	8.8%	
4	5.5	IMW-2 ^f and	1	37UJ	9.1	75.4%
			2	12UJ	9.6	20.0%
		DMW-1	3	14.6UJ	8.7UJ	40.4%
			4	15UJ	10	33.3%
		Average	19.7	9.4	42.3%	
5 ^g	11.2	IMW-1, IMW-2, and DMW-1	1	27UJ	16	40.7%
			2	31UJ	41J	0.0%
		Average	29	28.5	20.35%	
Total Average Percent Removal						28.1% ^h

Notes:

a mg/L = milligram per liter

b IMW-1 = Intermediate monitoring well No. 1

c J = Indicates an estimated concentration value. The result is considered qualitatively acceptable, but quantitatively unreliable.

d UJ = Estimated value that was 10 times less than the contract required quantitation limit

e DMW-1 = Deep monitoring well No. 1

f IMW-2 = Intermediate monitoring well No. 2

g Sampling run was abbreviated due to system failure

h Total average computed from the averages of the five runs

Table A5. 4-Methyl-2-Pentanone Concentration Summary

Run	Flow Rate (gallons per minute)	Well	Event Number	Untreated Concentration (mg/L) ^a	Treated Concentration (mg/L)	Percent Removal
1	2.1	IMW-1 ^b	1	64	12	81.3%
			2	70	17	75.7%
			3	53	24	54.7%
			4	57	31	45.6%
	Average			61	21	64.3%
2	5.2	IMW-1	1	45	19	57.8%
			2	66	25	62.1%
			3	46	9.5	79.3%
			4	35	13	62.9%
	Average			48	16.6	65.5%
3	9.0	IMW-1	1	39	23	41.0%
		and	2	45	25	44.4%
		DMW-1 ^c	3	39	21	46.2%
			4	42	21	50.0%
	Average			41.3	22.5	45.4%
4	5.5	IMW-2 ^d	1	28	17	39.3%
		and	2	28	14	50.0%
		DMW-1	3	37	18	51.4%
			4	30	18	40.0%
	Average			30.8	16.8	45.2%
5 ^e	11.2	IMW-1, IMW-2,	1	40	30	25.0%
		and DMW-1	2	24	32	0.0%
	Average			32	31	12.5%
Total Average Percent Removal						46.6% ^F

Notes:

a mg/L = milligram per liter

b IMW-1 = Intermediate monitoring well No. 1

c DMW-1 = Deep monitoring well No. 1

d IMW-2 = Intermediate monitoring well No. 2

e Sampling run was abbreviated due to system failure

f Total average computed from the averages of the five runs

Table A6. 2-Butanone Concentration Summary

Run	Flow Rate (gallons per minute)	Well	Event Number	Untreated Concentration (mg/L) ^a	Treated Concentration (mg/L)	Percent Removal
1	2.1	IMW-1 ^b	1	120	86	28.3%
			2	53	70	0.0%
			3	90	62	31.1%
			4	100	63	37.0%
			Average	90.8	70.3	24.1%
2	5.2	IMW-1	1	94	79	16.0%
			2	110	86J ^c	21.8%
			3	100	46	54.0%
			4	71	58	18.3%
			Average	93.8	67.3	27.5%
3	9.0	IMW-1	1	79	77	2.5%
		and	2	84	82	2.4%
		DMW-1 ^d	3	85	61	28.2%
			4	88	76	13.6%
		Average	84	74	11.7%	
4	5.5	IMW-2 ^e	1	110	100	9.1%
		and	2	90	95	NA
		DMW-1	3	120	94	21.7%
			4	110	99	10.0%
		Average	107.5	97	13.6%	
5 ^f	11.2	IMW-1, IMW-2,	1	96	90	6.3%
		and DMW-1	2	65	100	0.0%
		Average	80.5	95	3.2%	
Total Average Percent Removal						16.0% ^g

Notes:

a mg/L = milligram per liter

b IMW-1 = Intermediate monitoring well No. 1

c J = Indicates an estimated concentration value. The result is considered qualitatively acceptable, but quantitatively unreliable.

d DMW-1 = Deep monitoring well No. 1

e IMW-2 = Intermediate monitoring well No. 2

f Sampling run was abbreviated due to system failure

g Total average computed from the averages of the five runs

Table A7. Methylene Chloride Concentration Summary

Run	Flow Rate (gallons per minute)	Well	Event Number	Untreated Concentration (mg/L) ^a	Treated Concentration (mg/L)	Percent Removal
1	2.1	IMW-1 ^b	1	NA ^c	NA	NA
			2	NA	NA	NA
			3	NA	NA	NA
			4	NA	NA	NA
	Average	NA	NA	NA		
2	5.2	IMW-1	1	NA	NA	NA
			2	NA	NA	NA
			3	NA	NA	NA
			4	NA	NA	NA
	Average	NA	NA	NA		
3	9.0	IMW-1	1	NA	NA	NA
		and	2	NA	NA	NA
		DMW-1 ^d	3	NA	NA	NA
		4	NA	NA	NA	
	Average	NA	NA	NA		
4	5.5	IMW-2 ^e	1	38UJ ^f	2.4UJ	93.7%
		and	2	33UJ	2.0UJ	93.9%
		DMW-1	3	34UJ	2.4UJ	92.9%
		4	38UJ	2.2UJ	94.2%	
	Average		35.8UJ	2.25UJ	93.7%	
5 ^g	11.2	IMW-1, IMW-2, and DMW-1	1	12UJ	3.8UJ	68.3%
		2	12UJ	4.0UJ	66.7%	
	Average		12UJ	3.9UJ	67.5%	
Total Average Percent Removal						80.6% ^h

Notes:

a mg/L = milligram per liter

b IMW-1 = Intermediate monitoring well No. 1

c NA = Contaminant was not detected in influent or effluent, therefore, event is negated

d DMW-1 = Deep monitoring well No. 1

e IMW-2 = Intermediate monitoring well No. 2

f UJ = Estimated value that was 10 times less than the contract required quantitation limit

g Sampling run was abbreviated due to system failure

h Total average computed from the averages of the five runs

Table A8. 1,1-Dichloroethene Concentration Summary

Run	Flow Rate (gallons per minute)	Well	Event Number	Untreated Concentration (mg/L) ^a	Treated Concentration (mg/L)	Percent Removal
1	2.1	IMW-1 ^b	1	NA ^c	NA	NA
			2	NA	NA	NA
			3	NA	NA	NA
			4	NA	NA	NA
			Average	NA	NA	NA
2	5.2	IMW-1	1	NA	NA	NA
			2	NA	NA	NA
			3	NA	NA	NA
			4	NA	NA	NA
			Average	NA	NA	NA
3	9.0	IMW-1	1	NA	NA	NA
		and	2	NA	NA	NA
		DMW-1 ^d	3	NA	NA	NA
			4	[2.5] ^e	[0.13]	94.8%
		Average		NA	NA	NA
4	5.5	IMW-2 ^f	1	11	[0.3]	97.3%
		and	2	10	[0.13]	98.7%
		DMW-1	3	11	[0.3]	97.3%
			4	11	[0.3]	97.3%
		Average		10.75	[0.3]	97.7%
5 ^g	11.2	IMW-1, IMW-2,	1	4.4J ^h	[0.13]	97.0%
		and DMW-1	2	4.6J	[0.3]	93.5%
		Average		4.5J	[0.25]	95.3%
Total Average Percent Removal						96.5% ⁱ

Notes:

a mg/L = milligram per liter

b IMW-1 = Intermediate monitoring well No. 1

c NA = Contaminant was not detected in both influent and effluent and thus cannot be used

d DMW-1 = Deep monitoring well No. 1

e [] = Indicates compound was analyzed for but not detected above the sample quantitation limit. The untreated concentration is the sample quantitation limit and the treated concentration is half of the sample quantitation limit.

f IMW-2 = Intermediate monitoring well No. 2

g Sampling run was abbreviated due to system failure

h J = Indicates an estimated concentration value. The result is considered qualitatively acceptable, but quantitatively unreliable.

i Total average computed from the averages of the five runs

Table A9. Toluene Concentration Summary

Run	Flow Rate (gallons per minute)	Well	Event Number	Untreated Concentration (mg/L) ^a	Treated Concentration (mg/L)	Percent Removal
1	2.1	IMW-1 ^b	1	6.4	0.037J ^c	99.4%
			2	6.4	[0.65] ^d	89.8%
			3	4.7	0.79J	83.2%
			4	6.5	2.3	64.6%
	Average		6.0	0.94	84.3%	
2	5.2	IMW-1	1	6.1	[0.13]	97.9%
			2	6.3	[0.13]	97.9%
			3	6.0	[0.13]	97.8%
			4	6.0	[0.13]	97.8%
	Average		6.1	[0.13]	97.9%	
3	9.0	IMW-1	1	4.2	[0.13]	96.9%
		and	2	4.4	[0.13]	97.0%
		DMW-1 ^e	3	4.3	[0.07]	98.4%
		4	4.5	[0.13]	97.1%	
	Average		4.4	[0.12]	97.4%	
4	5.5	IMW-2 ^f	1	NA ^g	NA	NA
		and	2	3.9	[0.13]	96.7%
		DMW-1	3	NA	NA	NA
		4	NA	NA	NA	
	Average		3.9	0.13	96.7%	
5 ^h	11.2	IMW-1, IMW-2,	1	4.8J	0.16J	96.7%
		and DMW-1	2	4.2J	[0.3]	92.9%
	Average		4.5J	0.23	94.2%	
Total Average Percent Removal						94.3% ⁱ

Notes:

a mg/L = milligram per liter

b IMW-1 = Intermediate monitoring well No. 1

c J = Indicates an estimated concentration value. The result is considered qualitatively acceptable, but quantitatively unreliable.

d [] = Indicates compound was analyzed for but not detected above the sample quantitation limit. The untreated concentration is the sample quantitation limit and the treated concentration is half of the sample quantitation limit.

e DMW-1 = Deep monitoring well No. 1

f IMW-2 = Intermediate monitoring well No. 2

g NA = Contaminant was not detected in influent or effluent; therefore, event is negated

h Sampling run was abbreviated due to system failure

i Total average computed from the averages of the five runs

Table A10. cis-1,2-Dichloroethene Concentration Summary

Run	Flow Rate (gallons per minute)	Well	Event Number	Untreated Concentration (mg/L) ^a	Treated Concentration (mg/L)	Percent Removal
1	2.1	IMW-1 ^b	1	77	1.1	98.6%
			2	80	2.9	96.4%
			3	58	6.8	88.2%
			4	68	13	80.9%
			Average	70.8	6.0	90.9%
2	5.2	IMW-1	1	69	0.86	98.8%
			2	64	0.87	98.6%
			3	62	0.99	98.4%
			4	56	0.92	98.4%
			Average	62.8	0.91	98.6%
3	9.0	IMW-1 and	1	48	2.4	95.0%
			2	45	2.1	95.3%
		DMW-1 ^c	3	46	1.8	96.1%
			4	44	1.9	95.8%
		Average	45.8	2.1	95.6%	
4	5.5	IMW-2 and	1	6.4J ^e	[0.3] ^f	95.3%
			2	54	[0.13]	99.8%
		DMW-1	3	NA ^g	NA	NA
			4	NA	NA	NA
		Average	30.2	[0.26]	97.6%	
5 ^g	11.2	IMW-1, IMW-2, and DMW-1	1	34	3.8	88.8%
			2	29	3.6	87.6%
		Average	31.5	3.7	88.2%	
Total Average Percent Removal						94.2% ^h

Notes:

a mg/L = milligram per liter

b IMW-1 = Intermediate monitoring well No. 1

c DMW-1 = Deep monitoring well No. 1

d IMW-2 = Intermediate monitoring well No. 2

e J = Indicates an estimated concentration value. The result is considered qualitatively acceptable, but quantitatively unreliable.

f [] = Indicates compound was analyzed for but not detected above the sample quantitation limit. The untreated concentration is the sample quantitation limit and the treated concentration is half of the sample quantitation limit.

g Sampling run was abbreviated due to system failure

h Total average computed from the averages of the five runs

Table A11. Phenol Concentration Summary

Run	Flow Rate (gallons per minute)	Well	Event Number	Untreated Concentration (mg/L) ^a	Treated Concentration (mg/L)	Percent Removal
1	2.10 - 2.15	IMW-1 ^b	1	5.5	4.5	18.2%
			2	5.5	5.1	7.3%
			3	5.8	5.2	10.3%
			4	6.6	4.3	34.8%
	Average		5.9	4.8	17.7%	
2	5.16 - 5.21	IMW-1	1	4.2	5.3	0.0%
			2	4.3	5.3	0.0%
			3	4.6	4.5	2.2%
			4	4.6	4.4	4.3%
	Average		4.43	4.9	1.6%	
3	9.0	IMW-1	1	5.9	6.8	0.0%
		and	2	6.8	6.4	5.9%
		DMW-1 ^c	3	6.8	6.8	0.0%
		4	6.5	6.2	4.6%	
	Average		6.5	6.6	2.6%	
4	5.46	IMW-2 ^d	1	5.2	5.0	3.8%
		and	2	5.3	6.8	0.0%
		MW-1	3	5.4	4.0	25.9%
		4	5.2	4.8	7.7%	
	Average		5.3	5.2	9.4%	
5 ^e	11.18 - 11.23	IMW-1, IMW-2, and DMW-1	1	4.6	4.5	2.2%
		2	4.1	4.2	0.0%	
	Average		4.4	4.4	1.1%	
Total Average Percent Removal						6.5% ^f

Notes:

a mg/L = milligram per liter

b IMW-1 = Intermediate monitoring well No. 1

c DMW-1 = Deep monitoring well No. 1

d IMW-2 = Intermediate monitoring well No. 2

e Sampling run was abbreviated due to system failure

f Total average computed from the averages of the five runs

Table A12. 2-Methylphenol Concentration Summary

Run	Flow Rate (gallons per minute)	Well	Event Number	Untreated Concentration (mg/L) ^a	Treated Concentration (mg/L)	Percent Removal
1	2.1	IMW-1 ^b	1	4.6	3.6	21.7%
			2	4.5	3.9	13.3%
			3	4.8	3.8	20.8%
			4	5.4	3.2	40.7%
	Average		4.8	3.6	24.1%	
2	5.2	IMW-1	1	3.3	3.9	0.0%
			2	3.4	4.0	0.0%
			3	3.7	3.5	5.4%
			4	3.7	3.4	8.1%
	Average		3.5	3.7	3.4%	
3	9.0	IMW-1 and	1	2.7	3.1	0.0%
			2	3.1	2.9	6.5%
		DMW-1 ^c	3	3.1	3.0	3.2%
			4	2.9	2.7	6.9%
	Average		3.0	2.9	4.2%	
4	5.5	IMW-2 ^d and	1	2.0	2.0	0.0%
			2	2.0	2.7	0.0%
		DMW-1	3	2.1	1.5	28.6%
			4	1.9	1.8	5.3%
	Average		2.0	2.0	8.5%	
5 ^e	11.2	IMW-1, IMW-2, and DMW-1	1	2.9	2.8	3.4%
			2	2.6	2.7	0.0%
	Average		2.75	2.75	1.7%	
Total Average Percent Removal						8.4% ^f

Notes:

a mg/L = milligram per liter

b IMW-1 = Intermediate monitoring well No. 1

c DMW-1 = Deep monitoring well No. 1

d IMW-2 = Intermediate monitoring well No. 2

e Sampling run was abbreviated due to system failure

f Total average computed from the averages of the five runs

Table A13. 4-Methylphenol Concentration Summary

Run	Flow Rate (gallons per minute)	Well	Event Number	Untreated Concentration (mg/L) ^a	Treated Concentration (mg/L)	Percent Removal
1	2.1	IMW-1 ^b	1	19	16	15.8%
			2	18	16	10.5%
			3	19	16	15.8%
			4	21	15	28.6%
			Average	19.3	15.8	17.7%
2	5.2	IMW-1	1	13	14	0.0%
			2	13	15	0.0%
			3	14	13	7.1%
			4	14	13	7.1%
			Average	13.5	13.8	3.6%
3	9.0	IMW-1 and DMW-1 ^c	1	12	13	0.0%
			2	13	13	0.0%
			3	13	13	0.0%
			4	13	13	0.0%
			Average	12.8	13	0.0%
4	5.5	IMW-2 ^d and DMW-1	1	2.9	2.8	3.4%
			2	2.9	3.8	0.0%
			3	3.1	2.2	29.0%
			4	2.8	2.7	3.6%
			Average	2.9	2.9	9.0%
5 ^e	11.2	IMW-1, IMW-2, and DMW-1	1	7.6	7.6	0.0%
			2	7.3	7.4	0.0%
			Average	7.45	7.5	0.0%
Total Average Percent Removal						6.1% ^f

Notes:

a mg/L = milligram per liter

b IMW-1 = Intermediate monitoring well No. 1

c DMW-1 = Deep monitoring well No. 1

d IMW-2 = Intermediate monitoring well No. 2

e Sampling run was abbreviated due to system failure

f Total average computed from the averages of the five runs

Table A14. 2,4-Dimethylphenol Concentration Summary

Run	Flow Rate (gallons per minute)	Well	Event Number	Untreated Concentration (mg/L) ^a	Treated Concentration (mg/L)	Percent Removal
1	2.1	IMW-1 ^b	1	2.4	1.8	25.0%
			2	2.4	1.9	20.8%
			3	2.6	1.9	26.9%
			4	2.9	1.6	44.8%
			Average	2.6	1.8	29.4%
2	5.2	IMW-1	1	1.9	2.1	0.0%
			2	1.9	2.0	0.0%
			3	2.1	1.9	9.5%
			4	2.1	1.8	14.3%
			Average	2.0	2.0	6.0%
3	9.0	IMW-1	1	1.5	1.7	0.0%
			and	2	1.8	1.6
		DMW-1 ^c	3	1.8	1.7	5.6%
			4	1.7	1.4	17.6%
		Average	1.7	1.6	8.6%	
4	5.5	IMW-2 ^d	1	NA ^e	NA	NA
			and	2	NA	NA
		DMW-1	3	NA	NA	NA
			4	NA	NA	NA
		Average	NA	NA	NA	
5 ^f	11.2	IMW-1, IMW-2, and DMW-1	1	0.72	0.81	0.0%
			2	0.71	0.82	0.0%
		Average	0.715	0.815	0.0%	
Total Average Percent Removal						11.0% ^g

Notes:

a mg/L = milligram per liter

b IMW-1 = Intermediate monitoring well No. 1

c DMW-1 = Deep monitoring well No. 1

d IMW-2 = Intermediate monitoring well No. 2

e NA = Contaminant was not detected in both influent and effluent and thus cannot be used

f Sampling run was abbreviated due to system failure

g Total average computed from the averages of the five runs

Table A15. 4-Chloro-3-Methylphenol Concentration Summary

Run	Flow Rate (gallons per minute)	Well	Event Number	Untreated Concentration (mg/L) ^a	Treated Concentration (mg/L)	Percent Removal
1	2.1	IMW-1 ^b	1	0.6J ^c	0.46J	23.3%
			2	0.62J	0.51J	17.7%
			3	0.67J	0.49J	26.9%
			4	0.76J	0.46J	39.5%
	Average		0.66J	0.48	26.9%	
2	5.2	IMW-1	1	NA ^d	NA	NA
			2	NA	NA	NA
			3	NA	NA	NA
			4	NA	NA	NA
	Average		NA	NA	NA	
3	9.0	IMW-1	1	0.34J	0.38J	0.0
		and	2	0.4J	0.35J	12.5%
		DMW-1 ^e	3	0.38J	0.37J	2.6%
		4	0.37J	0.37J	0.0%	
	Average		0.37J	0.37J	5.0%	
4	5.5	IMW-2 ^f	1	NA	NA	NA
		and	2	NA	NA	NA
		DMW-1	3	NA	NA	NA
		4	NA	NA	NA	
	Average		NA	NA	NA	
5 ^g	11.2	IMW-1, IMW-2,	1	NA	NA	NA
		and DMW-1	2	NA	NA	NA
	Average		NA	NA	NA	
Total Average Percent Removal						16.0% ^h

Notes:

a mg/L = milligram per liter

b IMW-1 = Intermediate monitoring well No. 1

c J = Indicates and estimated concentration value. The result is considered qualitatively acceptable, but quantitatively unreliable.

d NA = Contaminant was not detected in both influent and effluent and thus cannot be used

e DMW-1 = Deep monitoring well No. 1

f IMW-2 = Intermediate monitoring well No. 2

g Sampling run was abbreviated due to system failure

h Total average computed from the averages of the five runs

Table A16. bis (2-Ethylhexyl) Phthalate Concentration Summary

Run	Flow Rate (gallons per minute)	Well	Event Number	Untreated Concentration (mg/L) ^a	Treated Concentration (mg/L)	Percent Removal
1	2.1	IMW-1 ^b	1	NA ^c	NA	NA
			2	NA	NA	NA
			3	NA	NA	NA
			4	NA	NA	NA
	Average		NA	NA	NA	
2	5.2	IMW-1	1	NA	NA	NA
			2	NA	NA	NA
			3	NA	NA	NA
			4	NA	NA	NA
	Average		NA	NA	NA	
3	9.0	IMW-1	1	NA	NA	NA
		and	2	NA	NA	NA
		DMW-1 ^d	3	NA	NA	NA
		4	NA	NA	NA	
	Average		NA	NA	NA	
4	5.5	IMW-2 ^e	1	2.8	0.25	91.1%
		and	2	3.5	1.5	57.1%
		DMW-1	3	3.0	1.0	66.7%
		4	2.9	3.0	0.0%	
	Average		3.1	1.4	53.7%	
5 ^f	11.2	IMW-1, IMW-2,	1	2.3	1.1	52.2%
		and DMW-1	2	1.7	0.61	64.1%
	Average		2.0	0.86	58.2%	
Total Average Percent Removal						56.0% ^g

Notes:

a mg/L = milligram per liter

b IMW-1 = Intermediate monitoring well No. 1

c NA = Contaminant was not detected in both influent and effluent and thus cannot be used

d DMW-1 = Deep monitoring well No. 1

e IMW-2 = Intermediate monitoring well No. 2

f Sampling run was abbreviated due to system failure

g Total average computed from the averages of the five runs

Table A17. Total Recoverable Petroleum Hydrocarbons Concentration Summary

Run	Flow Rate (gallons per minute)	Well	Event Number	Untreated Concentration (mg/L) ^a	Treated Concentration (mg/L)	Percent Removal
1	2.1	IMW-1 ^b	1	2.18	[0.3] ^c	86.2%
			2	2.76	[0.3]	89.1%
			3	2.82	0.75	73.3%
			4	2.58	1.14	55.8%
			Average	2.59	0.62	76.1%
2	5.2	IMW-1	1	2.78	[0.3]	89.2%
			2	3.54	0.71	79.9%
			3	3.28	0.65	80.3%
			4	3.11	0.58	81.4%
			Average	3.18	0.56	60.4%
3	9.0	IMW-1 and	1	2.0	[0.3]	85.0%
			2	1.35	[0.3]	77.8%
		DMW-1 ^d	3	1.7	[0.3]	82.4%
			4	1.29	[0.3]	76.7%
			Average	1.59	[0.3]	80.5%
4	5.5	IMW-2 ^e and	1	1.36	0.59	56.5%
			2	1.41	0.59	58.0%
		DMW-1	3	1.33	[0.3]	77.4%
			4	1.7	[0.3]	82.4%
			Average	1.45	0.45	68.6%
5 ^f	11.2	IMW-1, IMW-2, and DMW-1	1	1.36	0.568	58.2%
			2	1.43	0.64	55.2%
		Average	1.4	0.60	56.7%	
Total Average Percent Removal						68.5% ^g

Notes:

a mg/L = milligram per liter

b IMW-1 = Intermediate monitoring well No. 1

c [] = Indicates compound was analyzed for but not detected above the sample quantitation limit. The untreated concentration is the sample quantitation limit and the treated concentration is half of the sample quantitation limit.

d DMW-1 = Deep monitoring well No. 1

e IMW-2 = Intermediate monitoring well No. 2

f Sampling run was abbreviated due to system failure

g Total average computed from the averages of the five runs

Table A18. Metals Concentration Summary

Run	Flow Rate (gallons per minute)	Well	Event	Metal	Untreated Concentration (mg/L) ^a	Treated Concentration (mg/L)
1	2.1	IMW-1 ^b	1	Barium	0.228	0.170
				Calcium	174	160
				Iron	8.73	5.58
				Magnesium	381	337
				Strontium	1.64	1.61
3	5.2	IMW-1 and DMW-1 ^c	1	Barium	0.121	0.129
				Calcium	240	239
				Iron	3.04	3.10
				Magnesium	573	567
				Strontium	2.81	2.79
5 ^d	11.2	IMW-1, IMW-2 ^e , and DMW-1	2	Barium	0.0954	0.101
				Calcium	190	187
				Iron	4.1	3.97
				Magnesium	450	443
				Strontium	2.14	2.13

Notes:

a mg/L = milligram per liter

b IMW-1 = Intermediate monitoring well No. 1

c DMW-1 = Deep monitoring well No. 1

d Sampling run was abbreviated due to system failure.

e IMW-2 = Intermediate monitoring well No. 2

Table A19. General Chemistry Concentration Summary

Run	Flow Rate (gallons per minute)	Well	Event	General Chemistry	Untreated Concentration (mg/L) ^a	Treated Concentration (mg/L)
1	2.1	IMW-1 ^b	1	Carbonate alkalinity	ND ^c	60.6
				Total alkalinity	1,740	1,740
				Fluoride	0.402	0.366
				Silica	42.4	42.5
				Sulfate	399	466
				Total suspended solids	12.4	ND
3	9.0	IMW-1 and DMW-1 ^d	1	Carbonate alkalinity	ND	ND
				Total alkalinity	1,180	1,190
				Fluoride	0.392	0.345
				Silica	573	567
				Sulfate	2.81	2.79
				Total suspended solids	ND	ND
5 ^e	11.2	IMW-1, IMW-2 ^f , and DMW-1	2	Carbonate alkalinity	ND	ND
				Total alkalinity	1,410	1,390
				Fluoride	1.43	1.39
				Silica	26.5	27.5
				Sulfate	863	860
				Total suspended solids	3.67	ND

Notes:

a mg/L = milligram per liter

b IMW-1 = Intermediate monitoring well No. 1

c ND = Not detected

d DMW-1 = Deep monitoring well No. 1

e Sampling run was abbreviated due to system failure

f IMW-2 = Intermediate monitoring well No. 2

Table A20. Trichloroethene Concentrations in Air

Run	Flow Rate (gpm) ^a	Average Groundwater TCE Concentration (mg/L) ^b	Grab Number	Concentration of TCE in Vented Vapor (mg/m ³) ^c	Concentration of TCE in Vented Vapor (ppm) ^d
1	2.1	40	1	32,000	6,100
			2	29,000	5,500
2	5.2	42	1	19,000	3,700
			2	14,000	2,500
3	9.0	36	1	39,000	7,300
			2	38,000	7,200
4	5.5	230	1	94,000	18,000
			2	110,000	20,000
5 ^e	11.2	125	1	110,000	21,000
Average:		95		53,889	10,100

Notes:

a gpm = gallons per minute

b mg/L = milligram per liter

c mg/m³ = milligram per cubic meter

d ppm = parts per million

e Sampling run was abbreviated due to system failure

Table A21. Vinyl Chloride Concentrations in Air

Run	Flow Rate (gpm) ^a	Average Groundwater Vinyl Chloride Concentration (mg/L) ^b	Grab Number	Concentration of Vinyl Chloride in Vented Vapor (mg/m ³) ^c	Concentration of Vinyl Chloride in Vented Vapor (ppm) ^d
1	2.1	37.6	1	16,000	6,200
			2	15,000	5,900
2	5.2	11.5	1	13,000	5,000
			2	5,100	2,000
3	9.0	9.2	1	19,000	7,300
			2	8,700	3,400
4	5.5	8.1	1	[1,000] ^e	[395]
			2	[1,000]	[395]
5 ^f	11.2	5.7	1	14,000	5,500
Average:		14.4		10,311	4,010

Notes:

a gpm = gallons per minute

b mg/L = milligram per liter

c mg/m³ = milligram per cubic meter

d ppm = parts per million

e [] = Indicates compound was analyzed for but not detected above the sample quantitation limit. The concentration shown is half the sample quantitation limit.

f Sampling run was abbreviated due to system failure

Table A22. Acetone Concentrations in Air

Run	Flow Rate (gpm) ^a	Average Groundwater Acetone Concentration (mg/L) ^b	Grab Number	Concentration of Acetone in Vented Vapor (mg/m ³) ^c	Concentration of Acetone in Vented Vapor (ppm) ^d
1	2.1	35.6	1	4,800	2,000
			2	4,000	1,700
2	5.2	40.5	1	1,900 TR ^e	820
			2	1,800	760
3	9.0	26.8	1	2,100 TR	900 TR
			2	[1,000] ^f	[420]
4	5.5	19.7	1	[2,000]	[850]
			2	[2,000]	[850]
5 ^g	11.2	29	1	[2,000]	[850]
Average:		30.3		2,400	1,017

Notes:

a gpm = gallons per minute

b mg/L = milligram per liter

c mg/m³ = milligram per cubic meter

d ppm = parts per million

e TR = Detected below the indicated reporting limit

f [] = Indicates compound was analyzed for but not detected above the sample quantitation limit. The concentration shown is half the sample quantitation limit.

g Sampling run was abbreviated due to system failure

Table A23. 4-Methyl-2-Pentanone Concentrations in Air

Run	Flow Rate (gpm) ^a	Average Groundwater 4- Methyl-2- pentanone Concentration (mg/L) ^b	Grab Number	Concentration of 4-Methyl-2- pentanone in Vented Vapor (mg/m ³) ^c	Concentration of 4-Methyl-2- pentanone in Vented Vapor (ppm) ^d
1	2.1	61	1	12,000	3,000
			2	11,000	2,800
2	5.2	48	1	7,600	1,800
			2	4,400	1,100
3	9.0	41.3	1	3,800	920
			2	6,400	1,600
4	5.5	30.8	1	2,700	670 TR ^e
			2	[2,000] ^f	[490]
5 ^g	11.2	32	1	[2,000]	[490]
Average:		42.6		5,767	1,430

Notes:

a gpm = gallons per minute

b mg/L = milligram per liter

c mg/m³ = milligram per cubic meter

d ppm = parts per million

e TR = Detected below the indicated reporting limit

f [] = Indicates compound was analyzed for but not detected above the sample quantitation limit. The concentration shown is half the sample quantitation limit.

g Sampling run was abbreviated due to system failure

Table A24. 2-Butanone Concentrations in Air

Run	Flow Rate (gpm) ^a	Average Groundwater 2-Butanone Concentration (mg/L) ^b	Grab Number	Concentration of 2-Butanone in Vented Vapor (mg/m ³) ^c	Concentration of 2-Butanone in Vented Vapor (ppm) ^d
1	2.1	90.8	1	17,000	5,900
			2	14,000	4,700
2	5.2	93.8	1	8,400	2,900
			2	4,600	1,600
3	9.0	84.0	1	5,000	1,700
			2	5,700	1,900
4	5.5	107.5	1	4,100	1,400
			2	3,900 TR ^e	1,300 TR
5 ^f	11.2	80.5	1	[2,000] ^g	[700]
Average:		91.3		7,189	2,456

Notes:

a gpm = gallons per minute

b mg/L = milligram per liter

c mg/m³ = milligram per cubic meter

d ppm = parts per million

e TR = Detected below the indicated reporting limit

f Sampling run was abbreviated due to system failure

g [] = Indicates compound was analyzed for but not detected above the sample quantitation limit. The concentration shown is half the sample quantitation limit.

Table A25. Methylene Chloride Concentrations in Air

Run	Flow Rate (gpm) ^a	Average Groundwater Methylene Chloride Concentration (mg/L) ^b	Grab Number	Concentration of Methylene Chloride in Vented Vapor (mg/m ³) ^c	Concentration of Methylene Chloride in Vented Vapor (ppm) ^d
1	2.1	2.8	1	830 TR ^e	240 TR
			2	[500] ^f	[145]
2	5.2	2.5	1	[500]	[145]
			2	450	130
3	9.0	2.5	1	770 TR	230 TR
			2	[500]	[145]
4	5.5	10.75	1	32,000	9,300
			2	43,000	13,000
5 ^g	11.2	4.5J	1	23,000	6,800
Average:		4.6J		11,283	2,321

Notes:

a gpm = gallons per minute

b mg/L = milligram per liter

c mg/m³ = milligram per cubic meter

d ppm = parts per million

e TR = Detected below the indicated reporting limit

f [] = Indicates compound was analyzed for but not detected above the sample quantitation limit. The concentration shown half the sample quantitation limit.

g Sampling run was abbreviated due to system failure

Table A26. 1,1-Dichloroethene Concentrations in Air

Run	Flow Rate (gpm) ^a	Average Groundwater 1,1-Dichloroethene Concentration (mg/L) ^b	Grab Number	Concentration of 1,1- Dichloroethene in Vented Vapor (mg/m ³) ^c	Concentration of 1,1- Dichloroethene in Vented Vapor (ppm) ^d
1	2.1	2.8	1	[500] ^e	[125]
			2	[500]	[125]
2	5.2	2.5	1	[500]	[125]
			2	[200]	[50]
3	9.0	2.5	1	900 TR ^f	230 TR
			2	[500]	[125]
4	5.5	35.8UJ ^g	1	14,000	3,600
			2	20,000	5,000
5 ^h	11.2	12UJ	1	13,000	3,400
Average:		11.1UJ		5,588	1,420

Notes:

a gpm = gallons per minute

b mg/L = milligram per liter

c mg/m³ = milligram per cubic meter

d ppm = parts per million

e [] = Indicates compound was analyzed for but not detected above the sample quantitation limit. The concentration shown is half the sample quantitation limit.

f TR = Detected below the indicated reporting limit

g UJ = Estimated value that was 10 times less than the contract required quantitation limit

h Sampling run was abbreviated due to system failure

Table A27. cis-1,2-Dichloroethene Concentrations in Air

Run	Flow Rate (gpm) ^a	Average Groundwater cis-1,2- Dichloroethene Concentration (mg/L) ^b	Grab Number	Concentration of cis-1,2- Dichloroethene in Vented Vapor (mg/m ³) ^c	Concentration of cis-1,2- Dichloroethene in Vented Vapor (ppm) ^d
1	2.1	70.8	1	63,000	16,000
			2	57,000	15,000
2	5.2	62.8	1	44,000	11,000
			2	20,000	5,200
3	9.0	45.8	1	66,000	17,000
			2	48,000	12,000
4	5.5	20.1	1	14,000	3,600
			2	8,000	2,000
5 ^e	11.2	31.5	1	49,000	12,000
Average:		46.2		41,000	10,422

Notes:

a gpm = gallons per minute

b mg/L = milligram per liter

c mg/m³ = milligram per cubic meter

d ppm = parts per million

e Sampling run was abbreviated due to system failure

Table A28. Carbon Disulfide Concentrations in Air

Run	Flow Rate (gpm) ^a	Average Groundwater Carbon disulfide Concentration (mg/L) ^b	Grab Number	Concentration of Carbon disulfide in Vented Vapor (mg/m ³) ^c	Concentration of Carbon disulfide in Vented Vapor (ppm) ^d
1	2.1	5.5	1	[500] ^e	[160]
			2	[500]	[160]
2	5.2	5.0	1	[500]	[160]
			2	1,000	320
3	9.0	5.0	1	1,500	500
			2	[500]	[160]
4	5.5	16.3	1	[1,000]	[320]
			2	[1,000]	[320]
5 ^f	11.2	10.0	1	[1,000]	[320]
Average:		8.4		833	269

Notes:

a gpm = gallons per minute

b mg/L = milligram per liter

c mg/m³ = milligram per cubic meter

d ppm = parts per million

e [] = Indicates compound was analyzed for but not detected above the sample quantitation limit. The concentration shown is half the sample quantitation limit.

f Sampling run was abbreviated due to system failure

Table A29. Trichlorotrifluoroethane Concentrations in Air

Run	Flow Rate (gpm) ^a	Average Groundwater Trichlorotri- fluoroethane Concentration (mg/L) ^b	Grab Number	Concentration of Trichlorotri- fluoroethane in Vented Vapor (mg/m ³) ^c	Concentration of Trichlorotri- fluoroethane in Vented Vapor (ppm) ^d
1	2.1	2.8	1	3,900	510
			2	[500]	[65]
2	5.2	2.5	1	[500]	[65]
			2	[200]	[21]
3	9.0	2.5	1	[650]	[90]
			2	[500]	[65]
4	5.5	8.1	1	[1,000]	[130]
			2	2,600	340
5 ^f	11.2	5.0	1	1,900TR ^g	250TR
Average:		4.2		1,305	171

Notes:

a gpm = gallons per minute

b mg/L = milligram per liter

c mg/m³ = milligram per cubic meter

d ppm = parts per million

e [] = Indicates compound was analyzed for but not detected above the sample quantitation limit. The concentration shown is half the sample quantitation limit.

f Sampling run was abbreviated due to system failure

g TR = Compound was detected below the reporting limit

Table A30. Aquifer Temperature, pH, Conductivity Summary

Run	Time	Temperature (° C) ^a		pH		Conductivity (mmhos/cm) ^b	
		Untreated	Treated	Untreated	Treated	Treated	Untreated
1	0850	23	34	NA ^c	NA	NA	NA
	1031	NA	NA	6.5	6.5	NA	NA
	1115	23.0	36.0	NA	NA	NA	NA
2	0925	21.7	22.8	6.65	7.46	22.0	22.4
	1200	21.7	22.5	6.70	7.50	22.2	22.4
	1700	21.7	22.6	7.00	7.60	22.3	22.7
3	0900	21.6	23.9	6.78	7.45	31.8	31.7
	1350	21.8	24.6	6.86	7.47	29.5	31.2
	1625	21.9	25.7	6.84	7.45	31.5	31.3
4	1015	21.1	22.7	7.63	7.77	21.4	23.4
	1158	22.9	22.4	7.71	6.66	23.0	23.3
	1435	23.0	25.0	7.70	8.03	23.0	22.7
	1635	21.9	24.0	7.67	8.02	23.2	22.6
5 ^d	0950	22.3	24.9	7.09	7.54	26.2	25.8
Average		22.1	25.5	7.09	7.5	25.1	25.4

Notes:

a °C = degrees celsius

b mmhos/cm = millimhos per centimeter

c NA = Not analyzed due to a faulty meter

d Sampling run was abbreviated due to system failure

Table A31. ZENON System Operating Parameters

Time	Flow Rate (gpm) ^a	Total Water (gal) ^b	Feed Temperature		Feed Pressure		Vacuum (mbar) ^c	Chilled Water		Total Air (ft ³) ^f	Vacuum Disc Pressure (" hg) ^g	Compressor Pressure (kPa)
			In (°C) ^c	Out (°C)	In (kPa) ^d	Out (kPa)		TI-400 (°C)	TI-401 (°C)			
Run 1												
0815	1.93 ^h	43.9	66	67	60	41	25	4	4	93.1	23	90
0845		103.1	68	68	60	41	25	4	5	101.3	23	75
1000		256.4	70	70	61	41	32	4	4	113.7	23	85
1030		312.7	70	70	61	41	33	4	5	118.4	23	85
1100		372.8	70	70	60	41	25	4	5	124.2	23	85
1205		488.3	71	70	60	41	30	4	5	133.0	23	85
1300		601.4	70	70	60	41	30	4	4	143.2	23	85
1400		711.2	71	70	61	41	33	4	4	152.7	23	85
1500		829.1	70	69	61	41	29	4	5	162.2	23	85
1545		912.1	70	70	61	41	30	4	5	168.7	23	85
Run 2												
0850	5.0	57.4	60	62	35	16	35	4	4	178.7	24	85
0900		95.3	60	60	35	16	34	4	4	180.9	24	85
1000		408.8	60	59	35	18	30	4	4	191.2	24	85
1100		NR ⁱ	60	58	35	18	22	4	5	NR	24	85
1130		859.9	60	58	35	19	22	4	4	211.5	23	80
1200		1010.1	60	59	35	20	20	4	5	217.2	22	85
1300		1304.8	60	59	35	20	20	4	4	248.7	21	140
1400		1596.6	61	60	35	20	23	4	5	294.0	21	135
1500		1928.1	60	58	36	20	23	4	4	349.4	21	135
1600		2199.7	59	59	36	20	25	4	4	396.2	20	135
1630		2358.6	60	60	36	20	28	4	5	423.8	21	135

Table A31. ZENON System Operating Parameters (continued)

Time	Flow Rate (gpm) ^a	Total Water (gal) ^b	Feed Temperature		Feed Pressure		Vacuum (mbar) ^e	Chilled Water		Total Air (ft³) ^f	Vacuum Disc Pressure (" hg) ^g	Compressor Pressure (kPa)
			In (°C) ^c	Out (°C)	In (kPa) ^d	Out (kPa)		TI-400 (°C)	TI-401 (°C)			
Run 3												
0830	8.3	491.8	59	58	50	32	35	4	4	474.8	22	100
0900		738.3	59	59	50	32	27	4	5	482.3	22	100
1000		NR	60	59	51	32	27	4	4	NR	22	100
1100		1730.9	60	59	51	33	22	4	4	519.8	22	100
1200		2263.4	60	60	51	35	20	4	5	540.5	21	100
1300		2778.4	60	60	54	36	20	4	4	562.2	22	100
1330		3034.8	60	59	54	36	20	4	5	573.1	22	100
1400		3297.8	60	60	55	36	20	4	4	586.9	22	100
1500		3774.5	60	60	56	36	23	4	4	613.8	22	100
1600		4317.2	60	59	56	36	30	4	4	656.3	17	120
1630	4515.5	70	69	56	36	30	4	4	677.9	17	140	
Run 4												
0900	5.2	14.6	56	44	35	18	25	4	4	695.2	22	50
0930		155.4	60	60	35	19	26	4	4	705.7	22	85
1000		298.1	60	59	35	19	28	4	5	717.8	21	100
1100		624.8	60	59	35	19	34	4	4	735.8	21	100
1200		941.8	60	59	36	20	42	4	5	753.8	21	100
1300		1274.1	60	60	36	21	42	4	4	744.9	22	100
1400		1587.7	61	60	37	21	35	4	5	791.8	22	100
1430		1740.0	61	60	38	21	38	4	5	800.3	22	100
1500		1887.9	61	60	40	22	40	4	4	808.6	22	100
1600		2199.8	62	60	41	22	32	4	5	825.3	22	100
1645	2452.2	60	59	41	22	37	4	5	838.8	22	100	

Table A31. ZENON System Operating Parameters (continued)

Time	Flow Rate (gpm) ^a	Total Water (gal) ^b	Feed Temperature		Feed Pressure		Vacuum (mbar) ^c	Chilled Water		Total Air (ft ³) ^f	Vacuum Disc Pressure (" hg) ^g	Compressor Pressure (kPa)
			In (°C) ^c	Out (°C)	In (kPa) ^d	Out (kPa)		TI-400 (°C)	TI-401 (°C)			
RUN 5												
0815	10.7	119.6	50	45	75	50	64	4	4	857.7	21	50
0835		305.6	60	60	75	50	55	4	4	862.5	21	85
0900		611.1	60	59	75	50	56	4	5	867.2	22	90
1000		1247.9	60	60	75	51	45	4	4	872.6	22	90
1100		1885.9	60	59	76	51	30	4	5	884.6	22	100

Notes:

a gpm = gallons per minute

b gal = U.S. gallons

c °C = degrees celsius

d kPA = kilopascal

e mbar = millibar

f ft³ = cubic feet

g ¹/₂hg = inches of mercury

h Flow rates shown in this table were calculated from volume of water amassed during each run. The flow rates shown on all other tables in Appendix A were taken from a flow meter on the effluent line from the system.

i NR = not recorded